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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,556

04/27/2006

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NISSL

2770

20151 7590 05/26/2009

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EXAMINER

DOWE, KATHERINE MARIE

ART UNIT

PAPER NUMBER

3734

MAIL DATE

DELIVERY MODE

05/26/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/595,556	<b>Applicant(s)</b> NISSL, THOMAS	
	<b>Examiner</b> KATHERINE M. DOWE	<b>Art Unit</b> 3734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2,4 and 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,4 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The following is a complete response to the amendment filed January 23, 2009.
2. Claims 2, 4, and 6 are currently pending.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim recites the first and second connectors “alternatingly connect to a same one of the U-shaped arcuate sections in opposite relationship to one another throughout” in lines 10-11. Applicant does not have support for first and second connectors alternatingly connecting to a single U-shaped arcuate section – ie first connector A, second connector A, first connector B, and second connector B all connecting to the same U-shaped arcuate section in an alternating manner. For purposes of examination, the Examiner is interpreting the limitation such that first and second connectors repeatedly alternate in the direction of the longitudinal axis, wherein a first connector and a second connector connect to a same one of the U-shaped arcuate sections.

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5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the first and second connectors “alternatingly connect to a same one of the U-shaped arcuate sections in opposite relationship to one another throughout” (lines 10-11). For purposes of examination, the Examiner is interpreting the limitation such that first and second connectors repeatedly alternate in the direction of the longitudinal axis, wherein a first connector and a second connector connect to a same one of the U-shaped arcuate sections.

***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 2, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Majercak (US 2004/0002750) in view of White et al. (US 2003/0105517) and Yoon (WO 01/98417 A1). Majercak discloses the invention substantially as claimed including a stent comprising a tubular support frame defining a longitudinal axis and expandable from an initial state to a support state (Figure 3). The support frame includes a plurality of ring segments arranged in succession in a direction of the longitudinal axis formed by struts (31), with U-shaped arcuate sections (36) joining the struts to thereby form a wave-like configuration in a circumferential direction of the support frame. The ring

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segments define wave crests and valleys, which confront one another. Adjacent ring segments are linked by first (38B) and second (38A) connectors, which alternate in a same circumferential plane and repeatedly alternate in the direction of the longitudinal axis. Each connector is formed with a U-shaped compensating section pointing in a same circumferential direction. The first connector (38B) has a length, in a direction of the longitudinal axis, greater than a length of the second connector (38A). The first connectors have arcuate legs disposed on both sides of the compensating sections, wherein each of the arcuate legs is disposed in a same circumferential plane adjacent to a corresponding one of the struts and curved in the same circumferential plane as the adjacent strut. The connectors are linked to the arcuate sections by connections, wherein the connections of the first connectors and the connections of the second connectors confront one another.

However, Majercak does not disclose the struts assume a generally linear configuration in the support state after being curved in an initial state. White et al. disclose it is desirable to have a strut (48) curved in a compressed, or initial, state (Fig 3) and assume a generally linear configuration in an expanded, or support, state (Fig 4). White et al. teaches that such a configuration helps maintain the length of the stent between the initial and support states (§0041-0042). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Majercak such that the struts maintained a curved design in the initial state to maintain a minimum profile and assume a generally linear configuration in an expanded support state to keep the length of the stent constant as the stent

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expands, thus reducing harm to the vessel that may be caused by the stent rubbing against the vessel wall if it shortens upon expansion.

Additionally, Majeracak does not disclose a first connector and a second connector connect to a same one of the U-shaped arcuate segments in opposite relationship. Yoon discloses a first connector and a second connector alternating in the longitudinal direction, wherein a first connector and a second connector connect to a same U-shaped arcuate section of a ring segment (Fig 3b). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Majeracak such that a first connector and a second connector connected to a same one of the U-shaped arcuate segments in opposite relationship since it has been held that combining prior art elements according to known methods to yield predictable results involves only routine skill in the art.

### ***Response to Arguments***

9. Applicant's arguments filed January 23, 2009 have been fully considered but they are not persuasive.

10. Applicant argues White does not teach struts which are curved in an initial state and assume a generally linear configuration in the support state. The Examiner respectfully traverses the Applicant's remarks. White clearly teaches the general concept of forming stent segment 48 such that it is curved in an initial state (Fig 3) and assumes a generally linear configuration in the support state (Fig 4) to prevent foreshortening of the stent. The stent segment 48 may be interpreted as a "strut"

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because Applicant does not provide a special definition in the disclosure for the term "strut". Furthermore, the Examiner notes White is used to teach the general concept of a stent segment being curved in an initial state and being generally linear in a support state, which is being used to modify the strut, or specific stent segment, of Majercak.

11. Applicant additionally argues Majercak fails to show struts curved in a same circumferential direction. The Examiner respectfully traverses the Applicant's remarks. At least a minimal portion of the stent struts adjacent the U-shaped arcuate sections of Majercak are curved in the same circumferential direction. Alternatively, White clearly teaches stent segments, or struts, are curved in a same circumferential direction and thus the combination of Majercak and White reads on the claimed invention.

12. Applicant additionally argues the arcuate legs of the first connector of Majercak are not curved in the same circumferential plane as an adjacent strut. The Examiner respectfully traverses the Applicant's remarks. The struts and the arcuate legs form a cylindrical member and are thus inherently curved in the same circumferential plane. Alternatively, at least a portion of the strut adjacent to the arcuate leg on one side of the arcuate leg is curved in the same direction as the arcuate leg (ie, at least a minimal portion of the stent strut adjacent the U-shaped arcuate section is curved in one direction on one side of the U-shaped arcuate section and curved in a second direction on a second side of the U-shaped arcuate section).

13. Applicant's arguments, see amendment, filed January 23, 2009, with respect to the rejection(s) of claim(s) 2, 4, and 6 under Majercak and White, regarding the added limitation to claim 6, have been fully considered and are persuasive. Applicant argues

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Majeracak does not disclose a first connector and a second connector connect to a same one of the U-shaped arcuate segments in opposite relationship. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Yoon (WO 01/98417 A1).

### ***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATHERINE M. DOWE whose telephone number is (571)272-3201. The examiner can normally be reached on M-F 8:30am - 5pm.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin T. Truong/  
Primary Examiner, Art Unit 3734

Katherine Dowe  
May 21, 2009

/K. M. D./  
Examiner, Art Unit 3734